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**Comments: West Tavaputs Plateau Natural Gas Full Field Development  
Plan Draft Environmental Impact Statement (UT-070-05-055)**

The Nine Mile Canyon Coalition (Coalition) appreciates the opportunity to comment on the West Tavaputs Plateau Natural Gas Full Field Development Plan Draft Environmental Impact Statement (WTDEIS, UT-070-05-055). The Coalition exists to preserve and protect Nine Mile Canyon in partnership with land holders, user groups, federal, state, and local agencies, and Native American organizations. To that end, the Coalition fosters educational and interpretive programs which include, but are not limited to: assisting in the coordination of canyon interests, promoting programs of scientific research in the canyon, helping with inventory of cultural and natural resources, and raising funds - from earnings or gifts - for research, education, interpretive or preservation programs as such funds become available.

Throughout its fifteen-year history, the Coalition has worked on numerous projects to protect the historical resources in Nine Mile Canyon and the surrounding area, as well as to enhance the experience of canyon users and visitors. In fact, it is leading the way in the nomination of Nine Mile Canyon to the National Register of Historic Places. Many of these projects involved partnerships with the Price Field Office BLM including the writing of the Nine Mile Canyon Interpretive Plan, development and production of the Nine Mile Canyon brochure, installation of rest rooms at Daddy Canyon, development of trails at Daddy Canyon and the design and fabrication of an interpretive panel for the Ute Hunt Scene, also at Daddy Canyon. We have conducted an annual clean-up campaign in Nine Mile Canyon, the most recent one held Saturday, April 19, 2008. We stress that we do not oppose the legal and thoughtful development of natural gas leases on the West Tavaputs Plateau. However, we do vigorously oppose the destruction of cultural resources, both historic and prehistoric, in Nine Mile Canyon.

As an organization we feel there are numerous deficiencies in the WTDEIS that make the document a great disappointment for the public who have entrusted our public lands to your care. In this letter we will comment on deficiencies and needed improvements focusing on the cultural resources. We have also attached studies

commissioned by the Coalition and other organizations to evaluate other sections of the WTDEIS.

There are significant and fundamental problems with all action alternatives. These flaws warrant greater consideration and analysis. Alternative B (no action) may be appropriate until such time the as the BLM fully considers the issues addressed below, most of which are found in greater detail in the comments submitted by Jerry Spangler of the Colorado Plateau Archaeological Alliance (CPAA, attached). The impacts to cultural resources are only marginally different from one alternative to another as reflected in the WTDEIS, and regardless of which alternative is chosen, the impacts will be substantial. Even Alternative B (no action) will have harmful effects on the canyon because of the already ongoing damage and deterioration of the road due to industrial traffic, and the potential for further damage to cultural resources if the dust problem continues to remain unaddressed.

As stated by Jeffrey Rust in his comment letter (attached): “It is abundantly clear from the discussions on cultural resources in the Affected Environment Section (Chapter 3) and from descriptions of cultural resources in the Environmental Consequences Section (Chapter 4) that cultural resource identification efforts have not been sufficient to provide an understanding of the nature and types of cultural resources that will be affected or how those resources will be affected. Significant sections of the project area, such as plateaus and side canyons, have not been sufficiently reviewed and some areas have absolutely no data in regards to the presence or absence of cultural resources. It is impossible to evaluate and analyze how this full field gas development program will affect cultural resources without sufficient data to provide insight into what cultural resources are present” (p. 2).

In addition to what Mr. Spangler and Mr. Rust raise, there are three specific topics we think have been ignored or treated insufficiently in the WTDEIS: 1) alternative routes to the plateau avoiding Nine Mile Canyon, 2) continued exclusion of the Nine Mile Canyon Coalition and other preservation groups from consulting parting status, and 3) failure to include the final report of the Constance Silvers dust study.

**Alternative Transportation Routes.** *The WTDEIS fails to address an alternative that would route energy development related traffic in a way that bypasses or avoids the sensitive cultural resources of Nine Mile Canyon.* All of the proposed alternatives require the construction of new roads to BLM standards. The existing roads already traverse difficult and rugged terrain. Winter access to the West Tavaputs Plateau through Harmon Canyon and Cottonwood Canyon already requires heroic efforts to get industrial vehicles up the steep slopes. The Coalition recommended to the BLM that by-pass routes were feasible but BLM dismissed this recommendation citing the presence of petroglyphs in the by-pass areas. It is difficult to imagine that there would be more cultural resources impacted by the construction of an alternative route down Trail Canyon or one of the other side canyons than would be damaged by the continual and brutal assault of industry vehicles on the Nine Mile Road as it winds through 40 miles of world class rock art panels and structures. Potential impacts to a resource type cannot be a reason for

dismissing an alternative outright. Instead, the alternative must be compared and contrasted with other alternatives to determine the relative impacts of each choice. Bruin Point may be problematic in the winter, but directing spring, summer, and fall traffic to that route as well as requiring gas field workers to use that access to the plateau would do much to reduce the cumulative impacts of traffic in Nine Mile Canyon. *Alternative transportation routes must receive serious consideration, rather than the out-of-hand dismissal manifested in the WTDEIS.*

**Consulting Parties.** *Despite the voluminous nature of the document, under all five alternatives the WTDEIS reflects a remarkable scarcity of creative thinking in terms of how cultural resources are addressed and considered.* In effect, the impacts to cultural resources under Alternative A (industry preferred) are largely identical to impacts articulated for Alternative E (agency preferred) and only marginally different from Alternative C (transportation reduction alternative). The no-surface-occupancy stipulations specified under Alternative D (conservation alternative) offer some hope that cultural resources in some localities would be impacted less than under the other action alternatives, but the impacts under this alternative are nonetheless substantial. None of the alternatives proposed in the WTDEIS demonstrate a serious attempt to consider a full range of ways to avoid, minimize or mitigate potential adverse effects to historic properties, nor does the document reflect efforts among consulting parties to reach agreement on measures to achieve those ends.

Especially disingenuous are statements to the effect that the BLM seeks a collaborative approach to problem solving. For example, Chapter 1 states that any amendments necessary to the Price River Management Framework Plan to accommodate full-field development would be developed by the BLM through “a collaborative and multi-jurisdictional approach, where possible, to jointly determine the desired future condition of public lands” (WTDEIS 1-7). In actuality, the Price Field Office has demonstrated repeated opposition, if not hostility, to a collaborative approach to resolving conflicts over cultural resources by categorically denying consulting party status to the National Trust for Historic Preservation, the Southern Utah Wilderness Alliance, the Nine Mile Canyon Coalition and the Colorado Plateau Archeological Alliance – all “organizations with a demonstrated interest in the undertaking” that are legally entitled to “participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking’s effects on historic properties” (36 CFR 800.2(5)(d)(1).

The Nine Mile Canyon Coalition believes the utter absence of creative approaches to avoid, minimize or mitigate impacts to cultural resources articulated in the WTDEIS is a direct consequence of the agency’s refusal to allow public participation in the Section 106 process in the past whereby BLM planners, state and tribal historic preservation officers, industry *and* organizations with demonstrated interests in the project area could attempt to reach agreement on avoidance, impact minimization and/or mitigation measures. Consequently, the WTDEIS alternatives are predominantly a reflection of BLM approaches (Alternative E) and industry approaches (Alternative A), with other action alternatives largely reflecting combinations of the two approaches.

By deferring all public participation to the public comment process allowed under NEPA, the Price Field Office has failed to recognize a fundamental and important difference between public participation under the National Historic Preservation Act and that allowed under NEPA: NEPA allows for public *comment* whereas NHPA allows for public *participation* in the resolution of conflicts arising from federal undertakings. Furthermore, BLM managers have not recognized that NHPA clearly draws a distinction between “organizations with a demonstrated interest in the undertaking” to be sought out as consulting parties (36 CFR 800.2(c)(5)) and the federal agency’s mandate to “seek public comment and input” (36 CFR 800.2(d)(2)).

As stated in 36 CFR 800.2(5)(d)(1), “The views of the public are essential to informed Federal decision-making in the Section 106 process. The agency official *shall* seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties” (emphasis added). As mentioned above, “certain individuals and organizations with a demonstrated interest in the undertaking may participate as consulting parties due to ... their concern with the undertaking’s effects on historic properties.” By deferring all public participation to “comments” allowed under NEPA, the BLM has *willingly and intentionally* violated the underlying spirit and intent of NHPA. In effect, the agency *plan* to involve the public in the Section 106 process (36 CFR 800.3(e)) is to not allow public participation in the Section 106 process at all.

Furthermore, 36 CFR 800.6(4) states “the agency official shall provide an opportunity for members of the public to express their views on *resolving adverse effects* of the undertaking” (emphasis added). This section is unequivocally referring to the public’s opportunity to comment on those efforts among consulting parties to resolve adverse effects, not on the public’s ability to comment on the undertaking itself through the NEPA process. The WTDEIS articulates no efforts whatsoever on the part of the Price BLM to solicit comments from the public specific to the resolution of adverse effects. In fact, the BLM has not revealed to the public what, if any, efforts have been initiated to resolve conflicts over cultural resources.

The Nine Mile Canyon Coalition strongly insists that the BLM withdraw the WTDEIS until consulting parties, including the Coalition, can meet with BLM and industry and develop a cadre of alternatives for the WTDEIS that will fully consider alternative transportation routes, complete dust studies, and detailed dust mitigation plans. By withdrawing the WTDEIS, the BLM will be embracing the spirit and intent of the NHPA by *seeking out* all willing consulting parties to participate in the resolution of adverse effects arising from full-field development, and indicating that future collaboration will reflect a willingness on the part of the BLM to engage alternative viewpoints of all interested parties.

We also strongly recommend the BLM more proactively communicate with the public on its efforts to resolve adverse effects to cultural resources, and that it provide additional opportunities to the public to express their views on efforts to resolve adverse

effects. This could and should include a transparent process of regular public meetings whereby consulting parties could explain efforts to reach agreement and the federal agency could account for its actions under NHPA.

The Nine Mile Canyon Coalition and others have been denied the opportunity to be involved in the findings and determinations made in the Section 106 process as required in 36 CFR 800. 36 CFR 800.3(e) and (f) require the federal agency to involve the public and identify interested parties as consulting parties to participate in this process.

36 CFR 800.3(g) allows for multiple steps to be addressed at one time, but the agency is required to make sure there is an adequate opportunity to express views. None of these steps are addressed in the WTDEIS and so there is no opportunity to comment on them.

36 CFR 800.4(a) requires participation in determining the Area of Potential Effects. This is not addressed in the WTDEIS.

36 CFR 800.4(2) requires consultation on what historic properties have not been yet identified. This has not been addressed with regard to: The Nine Mile Canyon Archaeological District, the Nine Mile Canyon Historic District, The Nine Mile Archaeological Landscape and The Nine Mile Canyon Historical Landscape. Archaeological and other historic properties not identified in the WTDEIS.

36 CFR 800.4(3) requires consultation on issues related to potential effects. This has not been addressed in the WTDEIS.

36 CFR 800.4(b) requires consultation on historic properties. Sites located along access routes have not been identified. Neither has any of the eligible Districts been identified in the WTDEIS.

36 CFR 800.4(c) requires consultation on historic significance. This has not been identified in the WTDEIS, especially in reference to sites and Districts mentioned above.

36 CFR 800.4(d) requires consultation on the results of identification and evaluations. This is not identified in the WTDEIS.

36 CFR 800.5 requires consultation on assessment of effects. This requires identification of any characteristics that qualify a historic property for the National Register. This is not addressed in the WTDEIS.

Since none of the above are in the WTDEIS, there has been no opportunity to develop and evaluate alternatives or modifications to avoid, minimize or mitigate effects as required by 36 CFR 800.6. Agencies are required to provide documentation for the public and interested parties on the entirety of the above process. This has not been done

in the WTDEIS. We reiterate – the WTDEIS should be withdrawn until all the above requirements have been fulfilled.

## **Dust Concerns**

The WTDEIS clearly acknowledges that dust is a problem, particularly along the Nine Mile Canyon corridor where rock art panels are abundant and dust has significant potential to obscure clarity and worse. However, the WTDEIS discussion repeatedly appears to deemphasize the seriousness of the problems related to impacts from road dust precipitated by industrial traffic. These include statements to the effect that “anticipated *indirect* impacts to cultural resources include the accumulation of dust and its impact on rock art, (and) the impact of vibration and project-related erosion on cultural resources” (WTDEIS ES 24-25), when in fact, the accumulation of road dust resulting from project traffic, impacts from vibration due to project-related traffic and increased erosion of cultural resources from project-related activities are all *direct* impacts to cultural resources resulting from project activities, and these impacts are *cumulative* over the 30 to 40-year life of the project.

As such, these impacts constitute adverse effects under one or more criteria that must be thoroughly addressed within the context of Section 106 compliance, regardless of whether the impacts are direct or indirect. As clearly stated in 36 CFR 800.5(a)(1), “an adverse effect is found when an undertaking may alter, *directly or indirectly*, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association” and “adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative” (emphasis added).

Particularly troubling is WTDEIS Appendix G, an October 2007 revised study of particulate dust conducted by Constance Silver of Preservar Inc., included in its entirety. This study cites preliminary lab results from EMSL Analytical of Westmont, N.J., to suggest that 17 dust samples were inconclusive for magnesium chloride, that “thus far it has been impossible to isolate and identify magnesium chloride in the laboratory,” and that magnesium chloride used in Nine Mile Canyon may have been chemically altered so that “magnesium chloride may not be present in Nine Mile Canyon because there is no magnesium chloride present” (Appendix G:6).

However, these statements are completely and unequivocally in opposition to test data from EMSL Analytical dated Oct. 22, 2007, that indicate that 15 (not 17) samples were analyzed, and that magnesium chloride was specifically identified in five samples, and that magnesium and/or chloride were identified in all remaining samples, although these could not be isolated to show magnesium chloride specifically (see EMSL Case No. 360700946). The contrary statements in Silver’s report suggest that either (1) the BLM mistakenly attached a preliminary report to the WTDEIS that inaccurately reflected the actual laboratory results and these do not represent Silver’s subsequent findings or final report; (2) that Silver never submitted a final report and that the WTDEIS is therefore

based on incomplete and erroneous data; or (3) the inclusion of preliminary lab results rather than final results is an intentional and deceptive effort on the part of the BLM to manipulate scientific data by minimizing the prevalence of magnesium chloride on rock art panels in Nine Mile Canyon.

Given the presence of magnesium chloride, magnesium and/or chloride in all samples tested, Silver's conclusions about the equivocal nature of the data should be rejected. Also suspect is her statement that "there is no proof at present that magnesium chloride used for dust abatement in Nine Mile Canyon has – or will – become a vector of deterioration for the canyon's resources" (Appendix G:33). In light of her statements that magnesium chloride is a "documented agent of deterioration of concrete and works of art" (Appendix G:1) and that agencies, organizations and scientists are raising concerns about magnesium chloride (Appendix G:32). The Coalition concurs with Silver's recommendations that additional studies into dust abatement technologies are warranted, and that impacted sites need to be identified and evaluated (Appendix G:34).

The Coalition also concurs with the WTDEIS (Section 4.12.1.2) that additional efforts are needed to identify, develop and implement acceptable dust-abatement treatments, that additional research needs to be initiated to develop treatments for removal of existing dust, that analytical systems should be implemented to quantitatively examine the success of dust-abatement treatments, and that all impacted rock art panels should be evaluated to determine the extent of the dust accumulation problem and thereby devise dust-abatement strategies (4-219). However, the WTDEIS identifies few strategies whereby these laudable goals will be achieved, nor does it specify a timetable wherein the research would be conducted, reported and recommendations implemented. Also disconcerting is the absence of interim strategies to protect rock art panels while scientific studies are underway, a *de facto* pronouncement by the BLM that current dust-abatement methods are sufficient until such time that future research demonstrates otherwise.

Ongoing site condition assessments in the Cottonwood Canyon confluence area (CPAA report in preparation) suggest the number of sites impacted by significant dust accumulation could be substantial, particularly in those areas where the road abuts the canyon wall. Preliminary data suggest that rock art sites within 30 meters horizontal and 30 meters vertical of an existing road have been severely impacted by dust accumulation, often to a point where images are no longer visible or are barely discernible. Dust accumulation was observed at many (although not all) sites up to 50 meters from an existing road. Evidence of dust accumulation at sites located beyond 50 meters from a road is more equivocal. The problem is particularly evident at those site locations where the rock art is located below and within overhangs that block rising dust plumes and redirect the rising plumes downward, coating the panels a second time. Also particularly vulnerable are rock art sites on sloping surfaces of less than 90 degrees. The preliminary study, which compares original site photographs to current site condition, examines only issues surrounding visual clarity and does not address the merits of different approaches to dust abatement.

In light of these concerns, the Coalition concurs with CPAA and recommends the following:

- The WTDEIS should more accurately reflect that dust accumulation is a direct impact to cultural resources, primarily rock art sites and historic signatures, and state that these impacts will be thoroughly mitigated through Section 106 compliance.
- Performance of the dust abatement studies recommended by Silver, including, but not limited to, those of the corrosive nature of magnesium chloride and related technologies, should be required and completed *prior* to implementing any dust abatement measures with materials other than purified water. Regardless of what alternative is chosen, the final WTDEIS should clearly require dust abatement measures and require that operators are to be held accountable for compliance with these measures.
- Baseline site condition assessments should be conducted to identify and evaluate those sites impacted by dust accumulation and to determine the spatial extent of the dust problem.
- The WTDEIS should articulate a requirement that periodic and consistent audits of site conditions will be conducted at those localities where National Register-eligible cultural resources are vulnerable to dust accumulation to monitor site degradation over the life of the project.
- The WTDEIS should be augmented to include a more thorough and thoughtful analysis by transportation engineers of potential options wherein dust impacts to cultural sites could be avoided entirely. This analysis should include an examination of potential re-routing of the existing road away from vulnerable and high-density cultural resources, an examination of new access routes through side canyons without a significant density of significant sites, and upgrades to existing routes that bypass Nine Mile Canyon.
- In light of (a) public concerns over dust and other damage in Nine Mile Canyon, both from cultural resource protection and public safety perspectives, (b) the BLM's stated preference to utilize the Nine Mile Canyon corridor, and (c) the likelihood that scientific studies on dust abatement issues will not generate consensus for many years, the Coalition recommends that *all* portions of the Nine Mile Canyon Road and project roads in major tributary canyons be paved in those areas where rock art panels and historic inscriptions are located within 50 meters horizontal distance from of outer edge of the road right-of-way.

The Coalition agrees with the comments provided by the Utah Rock Art Research Association (URARA draft attached). We especially concur with their "No Surface Occupancy recommendation.

There is little commentary in the DEIS regarding potential wells within Nine Mile Canyon itself. However, we note that the various project maps include several well sites within the canyon. We believe that wells within the canyon have a dramatic impact on the viewshed and visitor experience of the canyon. Land



ownership associated with these wells is not clear to us. In addition, the maps indicate two pumping stations to be located within the canyon. These wells and pumping stations are being presented as part of an overall project to be considered by the BLM. The BLM needs to consider the impact of these wells and pumping stations and their cumulative impact on the entire project. We do not support the drilling of additional wells, the creation of pumping stations, or any other surface occupancy within Nine Mile Canyon.

The Coalition also concurs with URARA member Steve Manning and his analysis of the dust study.

“Another study needs to be done, or the present one expanded, to provide information on the impacts from vehicle exhaust and emissions from other facilities on the rock art, and recommendations for a course of action to protect the rock art of NMC. This report has little information on the effect the dust is having on pictograph panels. Much more research needs to be done.”

## **Summary**

The WTDEIS is disturbingly flawed. The Coalition has provided our reasons for our determination of this conclusion. The WTDEIS should be withdrawn, or at a minimum, a substantive supplemental DEIS written, because: 1) there is no mitigation plan to stop damage to cultural resources in Nine Mile Canyon, 2) there is no consideration of an alternative by-pass industrial traffic route, 3) there is no consideration of consulting status for qualified organizations, and 4) there is no final report of the Constance Silver dust study.

As always, the Coalition stands willing and ready to assist the BLM with the issues confronting Nine Mile Canyon.

Sincerely,

Pam Miller  
Chair, Nine Mile Canyon Coalition

## Attachments:

Jeffrey Rust comments – A  
Jerry Spangler comments – B  
URARA draft comments - C